

## ***Fuels Planning: Science Synthesis and Integration***

### **Economic Uses Fact Sheet: 2**

## **Log Hauling Cost**



Pacific Northwest  
Research Station



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*Synthesizing  
Scientific Information  
for Fire and Fuels  
Project Managers*

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Fuels planning: Science synthesis and integration, an interagency research/management partnership to support the Ten-Year Fire Plan, led by Russell T. Graham, RMRS, and Sarah M. McCaffrey, NCRS.

### **Log Hauling Cost And Decisionmaking**



Knowing the cost of fuel reduction treatments and associated activities, such as hauling cut trees, is essential for fire and fuels planning. Achieving the goals of ecosystem management may result in an emphasis on harvest methods that may not necessarily be the most cost effective. For instance, managers may cut a larger proportion of small diameter trees and trees with low economic

value, and build fewer access roads in order to reduce impacts on fish and wildlife. The National Environmental Policy Act (NEPA) requires that planners explore alternatives to actions that have significant environmental impacts, and although economics should not be a factor weighed directly against other impacts in a NEPA context, managers will want financial information about alternatives in order to determine what options are reasonable and how much can be accomplished with available budgets. This fact sheet explores the main factors that determine the cost of hauling cut trees and points the user to an interactive tool that can help plan for those and other expenses.

### **Estimating Hauling Cost**

In order to estimate hauling cost per green ton or per 100 cubic feet of logs, you need to know the daily cost of a truck and driver, the expected number of loads per day for the hauling distance, and the capacity of the log truck in weight or volume. With this information, you can estimate the cost of hauling logs using *My Fuels Treatment Planner* (MyFTP), an MS Excel®-based, interactive tool being developed at the Pacific Northwest Research Station, USDA Forest Service. For some of these variables, MyFTP will input standard default values. Specifically, the calculator assumes that the daily cost for a truck and driver is \$580 and the capacity of the log truck is 26 green tons. However, you can override the default settings with your own values if you have them at hand.

### **What Information Do I Need to Have?**

*My Fuels Treatment Planner* will prompt you with the following questions:

- What is the expected one-way hauling distance for this project?
- MFTP estimates the number of loads per day for this hauling distance. Do you want to use the default value? If not, what is your estimate of the number of loads per day?

- The default cost per day for a driver and a truck that hauls 26 tons is \$580. Do you want to use that value? If not, what is your assumed cost per day?
- The default truck capacity is 26 tons. Do you want to use that value? If not, what is your assumed truck capacity?
- What is the average small end diameter of the logs?

The output will be the cost per 1,000 board feet, 100 cubic feet, green ton, and dry ton. This information can provide managers with important information to be used in the planning process for fire and fuels treatments.

## What About Chip Hauling?

The capacity and cost per day for a chip truck is similar to that of a log truck. A reasonable estimate for hauling chips is therefore the same as for logs. Most logging roads were not designed to accommodate chip trucks, however. In many situations, especially where turning radius is tight or when low clearance will cause the chip truck to high center on a rolling dip or hill crest, it may not be possible to haul chips.

## Reference

Lee, H. W.; Johnson, L. R. 1996. Calculating timber removal costs under ecosystem management. Idaho Forest, Wildlife and Range Experiment Station Bulletin No. 26 [May]. 15 p.



## Economics Team Fact Sheets

Look for fact sheet topics from the Economics Team including prescribed fire costs, harvesting, log hauling, NEPA and other regulations, wood utilization, economic impacts on communities, markets for wood, and harvest equipment requirements.

## Fuels Planning: Synthesis and Integration

This fact sheet is one in a series being produced as part of a larger project supported by the USDA Forest Service to synthesize new knowledge and information relevant to fire and fuels management. Fact sheets address topics related to stand structure, environmental impacts, economics, and human responses to these factors. Information in the fact sheets is targeted for the dry forests of the Inland West, but is often applicable across broad regions of the country. For more information, please visit our Web site at:

[www.fs.fed.us/fire/tech\\_transfer/synthesis/synthesis\\_index](http://www.fs.fed.us/fire/tech_transfer/synthesis/synthesis_index)

*The Fuels Planning fact sheets are based on preliminary findings. Information from fact sheets will be synthesized in an upcoming publication.*